

09/622439

534 Rec'd PCT/PTO 17 AUG 2000

1/24

SEQUENCE LIST

<110> Yamanouchi Pharmaceutical Co., Ltd.

T C620 <120> A novel G protein coupled receptor protein

<130> Y9905-PCT

<150> JP P1998-060245

<151> 1998-03-12

<150> JP P1999-026774

<151> 1999-02-03

<160> 26

<170> PatentIn Ver. 2.0

<210> 1

<211> 1128

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (1)..(1125)

<223> SREB1

<400> 1

atg	gcg	aac	gca	agc	gag	ccg	ggg	gtt	ggc	agc	ggc	ggc	ggc	gag	gca	gca	48
Met	Ala	Asn	Ala	Ser	Glu	Pro	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Glu	Ala	Ala	
1	5					10				15							

gcc	ctg	ggc	ctc	aag	ctg	gcc	acg	ctc	agc	ctg	ctg	tgc	gtg	agc	96	
Ala	Leu	Gly	Leu	Lys	Leu	Ala	Thr	Leu	Ser	Leu	Leu	Leu	Cys	Val	Ser	
20						25				30						

cta	gcg	ggc	aac	gtg	ctg	tgc	gcg	ctg	atc	gtg	cgg	gag	cgc	agc	144
Leu	Ala	Gly	Asn	Val	Leu	Phe	Ala	Leu	Ile	Val	Arg	Glu	Arg	Ser	
35						40			45						

ctg	cac	ccg	gcc	ccg	tac	tac	ctg	ctg	gac	ctg	tgc	ctg	gcc	gac	192
Leu	His	Arg	Ala	Pro	Tyr	Tyr	Leu	Leu	Asp	Leu	Cys	Leu	Ala	Asp	
50						55			60						

ggg	ctg	ccg	gca	ctc	gcc	tgc	atg	ctg	gca	gca	ccg	240			
Gly	Leu	Arg	Ala	Leu	Ala	Cys	Leu	Pro	Ala	Val	Met	Leu	Ala	Arg	
65						70			75		80				

ctg	gcg	gca	gcc	gca	ggg	gca	ccg	ccg	ggc	gca	ctg	ggc	tgc	aag	288
Arg	Ala	Ala	Ala	Ala	Gly	Ala	Pro	Pro	Gly	Ala	Leu	Gly	Cys	Lys	
85						90				95					

ctg	ctc	gcc	ttc	ctg	gcc	ggg	ctc	ttc	tgc	ttc	cac	gcc	ttc	ctg	336
Leu	Leu	Ala	Phe	Leu	Ala	Ala	Leu	Phe	Cys	Phe	His	Ala	Ala	Phe	
100						105			110						

6e 2

Best Available Copy

2/24

ctg ctg ggc gtg ggc gtc	acc cgc tac ctg gcc atc gcg cac cac cgc	384
Leu Leu Gly Val Gly Val	Thr Arg Tyr Leu Ala Ile Ala His His Arg	
115	120	125
ttc tat gca gag cgc ctg gcc ggc tgg ccg tgc gcc gcc atg ctg gtg	432	
Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val		
130	135	140
tgc gcc gcc tgg gcg ctg gcg ctg gcc ggc ttc ccg cca gtg ctg	480	
Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Phe Pro Pro Val Leu		
145	150	155
160		
gac ggc ggt ggc gac gac gag gac ggc ccg tgc gcc ctg gag cag cgg	528	
Asp Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg		
165	170	175
ccc gac ggc gcc ccc ggc ggc ctg ggc ttc ctg ctg ctg gcc gtg	576	
Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Ala Val		
180	185	190
gtg gtg ggc gcc acg cac ctc gtc tac ctc cgc ctg ctc ttc atc	624	
Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile		
195	200	205
cac gac cgc cgc aag atg cgg ccc ggc cgc ctg gtg ccc gcc gtc agc	672	
His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser		
210	215	220
cac gac tgg acc ttc cac ggc ccg ggc gcc acc ggc cag ggc gcc gcc	720	
His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala		
225	230	235
240		
aac tgg acg gcg ggc ttc ggc cgc ggg ccc acg ccg ccc gcg ctt gtg	768	
Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val		
245	250	255
ggc atc cgg ccc gca ggg cgc ggc ggc ggc cgc cgc ctc ctc gtg	816	
Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val		
260	265	270
ctg gaa gaa ttc aag acg gag aag agg ctg tgc aag atg ttc tac gcc	864	
Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala		
275	280	285
gtc acg ctg ctc ttc ctg ctc ctc tgg ggg ccc tac gtc gtg gcc agc	912	
Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser		
290	295	300
tac ctg cgg gtc ctg gtg cgg ccc ggc gcc gtc ccc cag gcc tac ctg	960	
Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu		
305	310	315
320		
acg gcc tcc gtg tgg ctg acc ttc gcg cag gcc ggc atc aac ccc gtc	1008	
Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val		
325	330	335

Best Available Copy

3/24

gtg tgc ttc ctc ttc aac agg gag ctg agg gac tgc ttc agg gcc cag 1056
 Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln
 340 345 350

tgc ccc tgc tgc cag agc ccc cgg acc acc cag gcg acc cat ccc tgc 1104
 Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys
 355 360 365

gac ctg aaa ggc att gat tta tga 1128
 Asp Leu Lys Gly Ile Gly Leu
 370 375

<210> 2

<211> 375

<212> PRT

<213> Homo sapiens

<400> 2

Met Ala Asn Ala Ser Glu Pro Gly Gly Ser Gly Gly Glu Ala Ala
 1 5 10 15

Ala Leu Gly Leu Lys Leu Ala Thr Leu Ser Leu Leu Cys Val Ser
 20 25 30

Leu Ala Gly Asn Val Leu Phe Ala Leu Leu Ile Val Arg Glu Arg Ser
 35 40 45

Leu His Arg Ala Pro Tyr Tyr Leu Leu Leu Asp Leu Cys Leu Ala Asp
 50 55 60

Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala Arg
 65 70 75 80

Arg Ala Ala Ala Ala Ala Gly Ala Pro Pro Gly Ala Leu Gly Cys Lys
 85 90 95

Leu Leu Ala Phe Leu Ala Ala Leu Phe Cys Phe His Ala Ala Phe Leu
 100 105 110

Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His Arg
 115 120 125

Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu Val
 130 135 140

Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Ala Phe Pro Pro Val Leu
 145 150 155 160

Asp Gly Gly Gly Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu Gln Arg
 165 170 175

Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu Ala Val
 180 185 190

Le 4/

Best Available Copy

4/24

Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe Phe Ile
195 200 205

His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala Val Ser
210 215 220

His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala Ala Ala
225 230 235 240

Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala Leu Val
245 250 255

Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu Leu Val
260 265 270

Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe Tyr Ala
275 280 285

Val Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val Ala Ser
290 295 300

Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala Tyr Leu
305 310 315 320

Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn Pro Val
325 330 335

Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg Ala Gln
340 345 350

Phe Pro Cys Cys Gln Ser Pro Arg Thr Thr Gln Ala Thr His Pro Cys
355 360 365

Asp Leu Lys Gly Ile Gly Leu
370 375

<210> 3
<211> 1113
<212> DNA
<213> Homo sapiens

<220>
<221> CDS
<222> (1)..(1110)
<223> SREB2

<400> 3
atg gcg aac tat agc ca gca gct gac aac att ttg caa aat ctc tcg 48
Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
1 5 10 15

cct cta aca gcc ttt ctg aaa ctg act tcc ttg ggt ttc ata ata gga 96
Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Gly
20 25 30

Best Available Copy

5/24

gtc agc gtg gtg ggc aac	ctc ctg atc tcc att ttg cta gtg aaa gat	144	
Val Ser Val Val Gly Asn	Leu Leu Ile Ser Ile Leu Leu Val Lys Asp		
35	40	45	
aag acc ttg cat aga gca	cct tac tac ttc ctg ttg gat ctt tgc tgt	192	
Lys Thr Leu His Arg Ala	Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys		
50	55	60	
tca gat atc ctc aga tct	gca att tgt ttc cca ttt gtg ttc aac tct	240	
Ser Asp Ile Leu Arg Ser	Ala Ile Cys Phe Pro Phe Val Phe Asn Ser		
65	70	75	80
gtc aaa aat ggc tct acc	tgg act tat ggg act ctg act tgc aaa gtg	288	
Val Lys Asn Gly Ser Thr	Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val		
85	90	95	
att gcc ttt ctg ggg gtt	ttg tcc tgt ttc cac act gct ttc atg ctc	336	
Ile Ala Phe Leu Gly Val	Leu Ser Cys Phe His Thr Ala Phe Met Leu		
100	105	110	
ttc tgc atc agt gtc acc	aga tac tta gct atc gcc cat cac cgc ttc	384	
Phe Cys Ile Ser Val Thr	Arg Tyr Leu Ala Ile Ala His His Arg Phe		
115	120	125	
tat aca aag agg ctg acc	ttt tgg acg tgt ctg gct gtg atc tgt atg	432	
Tyr Thr Lys Arg Leu Thr	Phe Trp Thr Cys Leu Ala Val Ile Cys Met		
130	135	140	
gtg tgg act ctg tct gtg	gcc atg gca ttt ccc ccg gtt tta gac gtg	480	
Val Trp Thr Leu Ser Val	Ala Met Ala Phe Pro Pro Val Leu Asp Val		
145	150	155	160
ggc act tac tca ttc att	agg gag gaa gat caa tgc acc ttc caa cac	528	
Gly Thr Tyr Ser Phe Ile	Arg Glu Glu Asp Gln Cys Thr Phe Gln His		
165	170	175	
cgc tcc ttc agg gct aat	gat tcc tta gga ttt atg ctg ctt ctt gct	576	
Arg Ser Phe Arg Ala Asn	Asp Ser Leu Gly Phe Met Leu Leu Ala		
180	185	190	
ctc atc ctc cta gcc aca	cag ctt gtc tac ctc aag ctg ata ttt ttc	624	
Leu Ile Leu Leu Ala Thr	Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe		
195	200	205	
gtc cac gat cga aga aaa	atg aag cca gtc cag ttt gta gca gca gtc	672	
Val His Asp Arg Arg Lys	Met Lys Pro Val Gln Phe Val Ala Ala Val		
210	215	220	
agc cag aac tgg act ttt	cat ggt cct gga gcc agt ggc cag gca gct	720	
Ser Gln Asn Trp Thr Phe	His Gly Pro Gly Ala Ser Gly Gln Ala Ala		
225	230	235	240
gcc aat tgg cta gca gga	ttt gga agg ggt ccc aca cca ccc acc ttg	768	
Ala Asn Trp Leu Ala Gly	Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu		
245	250	255	

Li Li

Best Available Copy

6/24

ctg ggc atc agg caa aat	gca aac acc aca ggc aga aga agg cta ttg	816
Leu Gly Ile Arg Gln Asn	Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu	
260	265	270

gtc tta gac gag ttc aaa	atg gag aaa aga atc agc aga atg ttc tat	864
Val Leu Asp Glu Phe Lys	Met Glu Lys Arg Ile Ser Arg Met Phe Tyr	
275	280	285

ata atg act ttt ctg ttt	cta acc ttg tgg ggc ccc tac ctg gtg gcc	912
Ile Met Thr Phe Leu Phe	Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala	
290	295	300

tgt tat tgg aga gtt ttt	gca aga ggg cct gta gta cca ggg gga ttt	960
Cys Tyr Trp Arg Val Phe	Ala Arg Gly Pro Val Val Pro Gly Gly Phe	
305	310	315
		320

cta aca gct gct gtc tgg	atg agt ttt gcc caa gca gga atc aat cct	1008
Leu Thr Ala Ala Val Trp	Met Ser Phe Ala Gln Ala Gly Ile Asn Pro	
325	330	335

ttt gtc tgc att ttc tca	aac agg gag ctg agg cgc tgt ttc agc aca	1056
Phe Val Cys Ile Phe Ser	Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr	
340	345	350

acc ctt ctt tac tgc aga	aaa tcc agg tta cca agg gaa cct tac tgt	1104
Thr Leu Leu Tyr Cys Arg	Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys	
355	360	365

gtt ata tga		1113
Val Ile		
370		

<210> 4
 <211> 370
 <212> PRT
 <213> Homo sapiens

<400> 4
 Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
 1 5 10 15

Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
 20 25 30

Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
 35 40 45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
 50 55 60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
 65 70 75 80

Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
 85 90 95

Best Available Copy

7/24

Ile Ala Phe Leu Gly Val	Leu Ser Cys Phe His Thr Ala Phe Met Leu		
100	105	110	
Phe Cys Ile Ser Val Thr	Arg Tyr Leu Ala Ile Ala His His Arg Phe		
115	120	125	
Tyr Thr Lys Arg Leu Thr	Phe Trp Thr Cys Leu Ala Val Ile Cys Met		
130	135	140	
Val Trp Thr Leu Ser Val	Ala Met Ala Phe Pro Pro Val Leu Asp Val		
145	150	155	160
Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His			
165	170	175	
Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Ala			
180	185	190	
Leu Ile Leu Leu Ala Thr	Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe		
195	200	205	
Val His Asp Arg Arg Lys	Met Lys Pro Val Gln Phe Val Ala Ala Val		
210	215	220	
Ser Gln Asn Trp Thr Phe	His Gly Pro Gly Ala Ser Gly Gln Ala Ala		
225	230	235	240
Ala Asn Trp Leu Ala Gly	Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu		
245	250	255	
Leu Gly Ile Arg Gln Asn	Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu		
260	265	270	
Val Leu Asp Glu Phe Lys	Met Glu Lys Arg Ile Ser Arg Met Phe Tyr		
275	280	285	
Ile Met Thr Phe Leu Phe	Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala		
290	295	300	
Cys Tyr Trp Arg Val Phe	Ala Arg Gly Pro Val Val Pro Gly Gly Phe		
305	310	315	320
Leu Thr Ala Ala Val Trp	Met Ser Phe Ala Gln Ala Gly Ile Asn Pro		
325	330	335	
Phe Val Cys Ile Phe Ser	Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr		
340	345	350	
Thr Leu Leu Tyr Cys Arg	Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys		
355	360	365	
Val Ile			
370			

68

Best Available Copy

8/24

<210> 5
 <211> 1122
 <212> DNA
 <213> Homo sapiens

<220>
 <221> CDS
 <222> (1)..(1119)
 <223> SREB3

<400> 5

atg	gcc	aat	act	acc	gga	gag	cct	gag	gag	gtg	agc	ggc	gct	ctg	tcc	48
Met	Ala	Asn	Thr	Thr	Gly	Glu	Pro	Glu	Glu	Val	Ser	Gly	Ala	Leu	Ser	
1	5					10				15						

cca	ccg	tcc	gca	tca	gct	tat	gtg	aag	ctg	gta	ctg	ctg	gga	ctg	att	96
Pro	Pro	Ser	Ala	Ser	Ala	Tyr	Val	Lys	Leu	Val	Leu	Leu	Gly	Leu	Ile	
20						25				30						

atg	tgc	gtg	agc	ctg	gca	ggt	aac	gcc	atc	ttg	tcc	ctg	ctg	gtg	ctc	144
Met	Cys	Val	Ser	Leu	Ala	Cly	Asn	Ala	Ile	Leu	Ser	Leu	Leu	Val	Leu	
35						40				45						

aag	gag	cgt	gcc	ctg	cap	aag	gct	cct	tac	tac	ttc	ctg	ctg	gac	ctg	192
Lys	Glu	Arg	Ala	Leu	His	Lys	Ala	Pro	Tyr	Tyr	Phe	Leu	Leu	Asp	Leu	
50						55				60						

tgc	ctg	gcc	gat	ggc	ata	cgc	tct	gcc	gtc	ttc	ccc	ttt	gtg	ctg	240	
Cys	Leu	Ala	Asp	Gly	Ile	Arg	Ser	Ala	Val	Cys	Phe	Pro	Phe	Val	Leu	
65						70			75			80				

gct	tct	gtg	cgc	cac	gga	tct	tca	tgg	acc	ttc	agt	gca	ctc	agc	tgc	288
Ala	Ser	Val	Arg	His	Gly	Ser	Ser	Trp	Thr	Phe	Ser	Ala	Leu	Ser	Cys	
85						90			95							

aag	att	gtg	gcc	ttt	atg	gcc	gtg	ctc	ttt	tgc	ttc	cat	gcg	gcc	ttc	336
Lys	Ile	Val	Ala	Phe	Met	Ala	Val	Leu	Phe	Cys	Phe	His	Ala	Ala	Phe	
100						105			110							

atg	ctg	ttc	tgc	atc	age	gtc	acc	cgc	tac	atg	gcc	atc	gcc	cac	cac	384
Met	Leu	Phe	Cys	Ile	Ser	Val	Thr	Arg	Tyr	Met	Ala	Ile	Ala	His	His	
115						120			125							

cgc	ttc	tac	gcc	aag	cgc	atg	aca	ctc	tgg	aca	tgc	gcg	gct	gtc	atc	432
Arg	Phe	Tyr	Ala	Lys	Arg	Met	Thr	Leu	Trp	Thr	Cys	Ala	Ala	Val	Ile	
130						135			140							

tgc	atg	gcc	tgg	acc	ctg	tct	gtg	gcc	atg	gcc	ttc	cca	cct	gtc	ttt	480
Cys	Met	Ala	Trp	Thr	Leu	Ser	Val	Ala	Met	Ala	Phe	Pro	Pro	Val	Phe	
145						150			155			160				

gac	gtg	gcc	acc	tac	aag	ttt	att	cgg	gag	gag	gac	cag	tgc	atc	ttt	528
Asp	Val	Gly	Thr	Tyr	Lys	Phe	Ile	Arg	Glu	Glu	Asp	Gln	Cys	Ile	Phe	
165						170			175							

gag	cat	cgc	tac	ttc	aag	gcc	aat	gac	acg	ctg	ggc	ttc	atg	ctt	atg	576
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Best Available Copy

9/24

Glu His Arg Tyr Phe Lys	Ala Asn Asp Thr Leu Gly Phe Met Leu Met		
180	185	190	
ttg gct gtg ctc atg gca	gct acc cat gct gtc tac ggc aag ctg ctc	624	
Leu Ala Val Leu Met Ala	Ala Thr His Ala Val Tyr Gly Lys Leu Leu		
195	200	205	
ctc ttc gag tat cgt cac	cgc aag atg aag cca gtg cag atg gtg cca	672	
Leu Phe Glu Tyr Arg His	Arg Lys Met Lys Pro Val Gln Met Val Pro		
210	215	220	
gcc atc agc cag aac tgg	aca ttc cat ggt ccc ggg gcc acc ggc cag	720	
Ala Ile Ser Gln Asn Trp	Thr Phe His Gly Pro Gly Ala Thr Gly Gln		
225	230	235	240
gct gct gcc aac tgg atc	gcc ggc ttt ggc cgt ggg ccc atg cca cca	768	
Ala Ala Ala Asn Trp Ile	Ala Gly Phe Gly Arg Gly Pro Met Pro Pro		
245	250	255	
acc ctg ctg ggt atc cgg	cag aat ggg cat gca gcc agc cgg cgg cta	816	
Thr Leu Leu Gly Ile Arg	Gln Asn Gly His Ala Ala Ser Arg Arg Leu		
260	265	270	
ctg ggc atg gac gag gtc	aag ggt gaa aag cag ctg ggc cgc atg ttc	864	
Leu Gly Met Asp Glu Val	Lys Gly Glu Lys Gln Leu Gly Arg Met Phe		
275	280	285	
tac gcg atc aca ctg ctc	ttt ctg ctc ctc tgg tca ccc tac atc gtg	912	
Tyr Ala Ile Thr Leu Leu	Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val		
290	295	300	
gcc tgc tac tgg cga gtg	ttt gtg aaa gcc tgt gct gtg ccc cac cgc	960	
Ala Cys Tyr Trp Arg Val	Phe Val Lys Ala Cys Ala Val Pro His Arg		
305	310	315	320
tac ctg gcc act gct gtt	tgg atg agc ttc gcc cag gct gcc gtc aac	1008	
Tyr Leu Ala Thr Ala Val	Trp Met Ser Phe Ala Gln Ala Ala Val Asn		
325	330	335	
cca att gtc tgc ttc ctg	ttt gtg aaa gcc tgt gct gtg ccc cac cgc	1056	
Pro Ile Val Cys Phe Leu	Phe Val Lys Ala Cys Ala Val Pro His Arg		
340	345	350	
act cac gcc ccc tgc tgg	ttt gtg aaa gcc tgt gct gtg ccc cac cgc	1104	
Thr His Ala Pro Cys Trp	Phe Val Lys Ala Cys Ala Val Pro His Arg		
355	360	365	
ccc tac tgt gtc atg tga		1122	
Pro Tyr Cys Val Met			
370			

<210> 6
 <211> 373
 <212> PRT
 <213> Homo sapiens

Best Available Copy

10/24

<400> 6
 Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser
 1 5 10 15
 Pro Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
 20 25 30
 Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
 35 40 45
 Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
 50 55 60
 Cys Leu Ala Asp Gly Ile Arg Ser Ala Val Cys Phe Pro Phe Val Leu
 65 70 75 80
 Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
 85 90 95
 Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
 100 105 110
 Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
 115 120 125
 Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
 130 135 140
 Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
 145 150 155 160
 Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
 165 170 175
 Glu His Arg Tyr Phe Lys Ala Asn Asp Thr Leu Gly Phe Met Leu Met
 180 185 190
 Leu Ala Val Leu Met Ala Ala Thr His Ala Val Tyr Gly Lys Leu Leu
 195 200 205
 Leu Phe Glu Tyr Arg His Arg Lys Met Lys Pro Val Gln Met Val Pro
 210 215 220
 Ala Ile Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln
 225 230 235 240
 Ala Ala Ala Asn Trp Ile Ala Gly Phe Gly Arg Gly Pro Met Pro Pro
 245 250 255
 Thr Leu Leu Gly Ile Arg Gln Asn Gly His Ala Ala Ser Arg Arg Leu
 260 265 270
 Leu Gly Met Asp Glu Val Lys Gly Glu Lys Gln Leu Gly Arg Met Phe
 275 280 285

Best Available Copy

11/24

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gln Ala Ala Val Asn
325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
355 360 365

Pro Tyr Cys Val Met
370

<210> 7

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Forward primer

<400> 7

aaaatctaga cgcgatggcg aacgcgagcg a

31

<210> 8

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:reverse primer

<400> 8

aaaatctaga gtctatgtgg cggggccctcc c

31

<210> 9

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Forward primer

<400> 9

aaaatctaga tctatggcga actatagcca tgca

34

<210> 10

Best Available Copy

12/24

<211> 35
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 10
aaaatctaga aaggctaaag atttacagat gctcc 35

<210> 11
<211> 33
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Forward primer

<400> 11
aaaatctaga gtatggccaa cactaccgga gag 33

<210> 12
<211> 31
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:reverse primer

<400> 12
aaaatctaga cctgtctgcc taccagccig c 31

<210> 13
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:FLAG epitope

<400> 13
atggactaca aggacgacga tgacaagggg atcccg 36

<210> 14
<211> 12
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:FLAG epitope

<400> 14

Best Available Copy

13/24

Met Asp Tyr Lys Asp Asp Asp Asp Lys Gly Ile Leu
1 5 10

<210> 15

<211> 32

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Forward primer

<400> 15

aaaatctaga cggcgatggc gaacgctagt ga

32

<210> 16

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:reverse primer

<400> 16

aaaatctaga cacttgaga gtcttgtgaa ggc

33

<210> 17

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Forward primer

<400> 17

aaaatctaga tctatggcga actatacgca tgc

33

<210> 18

<211> 35

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Forward primer

<400> 18

aaaatctaga aaggctaaag atttacagat gctcc

35

<210> 19

<211> 34

<212> DNA

<213> Artificial Sequence

Best Available Copy

14/24

<220>

<223> Description of Artificial Sequence:reverse primer

<400> 19

aaaatctaga caaatactga actggccgat cccc

34

<210> 20

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:reverse primer

<400> 20

aaaatctaga tttttttttt agtatggta tcat

34

<210> 21

<211> 1134

<212> DNA

<213> Rattus sp.

<220>

<221> CDS

<222> (1)..(1131)

<223> Rat SREB1

<400> 21

atg gcg aac gct agt gag ccg ggc ggc ggc ggc ggg gcc gag gct 48
Met Ala Asn Ala Ser Glu Pro Gly Gly Gly Gly Gly Ala Glu Ala
1 5 10 15

gcc gcg ctg ggc ctc agg ctg gcc aca ctc agc ctg ctg tgc gtg 96
Ala Ala Leu Gly Leu Arg Leu Ala Thr Leu Ser Leu Leu Cys Val
20 25 30

agc ctg ggc aac gtg ctg ttc gct ctg ctc atc gtg agg gag cgc 144
Ser Leu Ala Gly Asn Val Leu Phe Ala Leu Ile Val Arg Glu Arg
35 40 45

agc ctg cac cgc gcg cct tac tac ctg ctc gac ctg tgc ctg gcc 192
Ser Leu His Arg Ala Pro Tyr Tyr Leu Leu Asp Leu Cys Leu Ala
50 55 60

gac ggg ctg cgc gcg ctc gcc tgt ctc ccg gcc gtc atg ctg gct gcg 240
Asp Gly Leu Arg Ala Leu Ala Cys Leu Pro Ala Val Met Leu Ala Ala
65 70 75 80

cgg cgc gcg gca gcc gcg gcg ggg acg cct ccg ggt gcg ctg ggc tgc 288
Arg Arg Ala Ala Ala Ala Ala Gly Thr Pro Pro Gly Ala Leu Gly Cys
85 90 95

aag ctg ctg gcc ttc ctg gcc gcg ctc ttc tgc ttc cac gcc ttc 336

Best Available Copy

15/24

Lys Leu Leu Ala Phe Leu	Ala Ala Leu Phe Cys Phe His Ala Ala Phe		
100	105	110	
ctg ctg ctg ggc gtc acc cgc tac ctg gcc atc gct cac cac	384		
Leu Leu Leu Gly Val Gly Val Thr Arg Tyr Leu Ala Ile Ala His His			
115	120	125	
cgc ttc tat gcc gag cgc ctg gcc ggc tgg ccg tgc gcc gcg atg ctg	432		
Arg Phe Tyr Ala Glu Arg Leu Ala Gly Trp Pro Cys Ala Ala Met Leu			
130	135	140	
gtg tgc gcc gcc tgg gcg ctg gct ttg gcc gcg gcc ttc ccg ccg gtg	480		
Val Cys Ala Ala Trp Ala Leu Ala Leu Ala Ala Phe Pro Pro Val			
145	150	155	160
ctg gac ggc ggt ggc gac gac gag gat gcg ccg tgc gcc ctg gag	528		
Leu Asp Gly Gly Ala Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu			
165	170	175	
cag cgg ccc gac ggc gcc ccg ggt gcg cta ggc ttc ctg ctg ctc ctg	576		
Gln Arg Pro Asp Gly Ala Pro Gly Ala Leu Gly Phe Leu Leu Leu			
180	185	190	
gcc gcg gtg gtg ggc gcc acg cac ctc gtc tac ctt ccg ctg ctc ttc	624		
Ala Ala Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe			
195	200	205	
ttc atc cac gac cgc cgc aag atg cgg ccc gca cgc ctg gtg ccc gcc	672		
Phe Ile His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala			
210	215	220	
gtc agc cac gac tgg acc ttc cac ggc ccg ggc gcc acc ggt caa gcg	720		
Val Ser His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala			
225	230	235	240
gcc gcc aac tgg acg gcg ggc ttc ggc ccg ggg ccc acg cca cct gcg	768		
Ala Ala Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala			
245	250	255	
ctc gtg ggc atc agg cct gca ggc ccg ggc cgc gga gcc cgg cgc ctc	816		
Leu Val Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu			
260	265	270	
ctg gtg ctg gag gaa ttc aag acg gag aag agg ctg tgc aag atg ttc	864		
Leu Val Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe			
275	280	285	
tac gcc atc acg ctg ctc ttc ctg ctc ctc tgg ggg ccc tat gtg gtt	912		
Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val			
290	295	300	
gcc agt tac ctg cgc gtc ctg gtg cgg ccc gga gct gtc ccg cag gcc	960		
Ala Ser Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala			
305	310	315	320
tac ctg aca gcc tcg gtg ctg aca ttc gca cag gcc ggc atc aac	1008		

Best Available Copy

16/24

Tyr Leu Thr Ala Ser Val	Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn	
325	330	335

ccc gtg gtg tgt ttc ctc	ttc aac cgg gag ctg agg gac tgt ttc aga	1056
Pro Val Val Cys Phe Leu	Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg	
340	345	350

gcc cag ttc ccc tgt tgc	cag agc ccc cag gcc acg cag gcc acc ctc	1104
Ala Gln Phe Pro Cys Cys	Gln Ser Pro Gln Ala Thr Gln Ala Thr Leu	
355	360	365

ccc tgc gac ctg aaa ggc	att ggt ttg tga	1134
Pro Cys Asp Leu Lys Gly	Ile Gly Leu	
370	375	

<210> 22
 <211> 377
 <212> PRT
 <213> Rattus sp.

<400> 22			
Met Ala Asn Ala Ser Glu	Pro Gly Gly Gly Gly Gly Ala Glu Ala		
1	5	10	15

Ala Ala Leu Gly Leu Arg	Leu Ala Thr Leu Ser Leu Leu Cys Val	
20	25	30

Ser Leu Ala Gly Asn Val	Leu Phe Ala Leu Leu Ile Val Arg Glu Arg	
35	40	45

Ser Leu His Arg Ala Pro	Tyr Tyr Leu Leu Asp Leu Cys Leu Ala	
50	55	60

Asp Gly Leu Arg Ala Leu	Ala Cys Leu Pro Ala Val Met Leu Ala Ala		
65	70	75	80

Arg Arg Ala Ala Ala Ala	Ala Gly Thr Pro Pro Gly Ala Leu Gly Cys	
85	90	95

Lys Leu Leu Ala Phe Leu	Ala Ala Leu Phe Cys Phe His Ala Ala Phe	
100	105	110

Leu Leu Leu Gly Val Gly	Val Thr Arg Tyr Leu Ala Ile Ala His His	
115	120	125

Arg Phe Tyr Ala Glu Arg	Leu Ala Gly Trp Pro Cys Ala Ala Met Leu	
130	135	140

Val Cys Ala Ala Trp Ala	Leu Ala Leu Ala Ala Phe Pro Pro Val		
145	150	155	160

Leu Asp Gly Gly Ala	Asp Asp Glu Asp Ala Pro Cys Ala Leu Glu	
165	170	175

Gln Arg Pro Asp Gly Ala	Pro Gly Ala Leu Gly Phe Leu Leu Leu
-------------------------	-------------------------------------

Best Available Copy

17/24

180

185

190

Ala Ala Val Val Gly Ala Thr His Leu Val Tyr Leu Arg Leu Leu Phe
 195 200 205

Phe Ile His Asp Arg Arg Lys Met Arg Pro Ala Arg Leu Val Pro Ala
 210 215 220

Val Ser His Asp Trp Thr Phe His Gly Pro Gly Ala Thr Gly Gln Ala
 225 230 235 240

Ala Ala Asn Trp Thr Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Ala
 245 250 255

Leu Val Gly Ile Arg Pro Ala Gly Pro Gly Arg Gly Ala Arg Arg Leu
 260 265 270

Leu Val Leu Glu Glu Phe Lys Thr Glu Lys Arg Leu Cys Lys Met Phe
 275 280 285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Gly Pro Tyr Val Val
 290 295 300

Ala Ser Tyr Leu Arg Val Leu Val Arg Pro Gly Ala Val Pro Gln Ala
 305 310 315 320

Tyr Leu Thr Ala Ser Val Trp Leu Thr Phe Ala Gln Ala Gly Ile Asn
 325 330 335

Pro Val Val Cys Phe Leu Phe Asn Arg Glu Leu Arg Asp Cys Phe Arg
 340 345 350

Ala Gln Phe Pro Cys Cys Gln Ser Pro Gln Ala Thr Gln Ala Thr Leu
 355 360 365

Pro Cys Asp Leu Lys Gly Ile Gly Leu
 370 375

<210> 23

<211> 1113

<212> DNA

<213> Rattus sp.

<220>

<221> CDS

<222> (1)..(1110)

<223> Rat SREB2

<400> 23

atg gcg aac tat agc cat gca gct gac aac att ttg caa aat ctc tcg 48
 Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
 1 5 10 15

cct cta aca gcc ttt ctg aaa ctg act tcc ttg ggt ttc ata ata gga 96
 Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly

Best Available Copy

18/24

20

25

30

gtc agt gtg gtc ggc aac ctt ctg atc tcc att ttg cta gtg aaa gat 144
 Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp

35

40

45

aag acc ttg cat aga gct cct tac tac ttc ctg ctg gat ctg tgc tgc 192
 Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
 50 55 60

tca gac atc ctc aga tct gca att tgt ttt cca ttt gta ttc aac tct 240
 Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
 65 70 75 80

gtc aaa aat ggc tct acc tgg act tac ggg act ctg act tgc aaa gtg 288
 Val Lys Asn Gly Ser Thr Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val
 85 90 95

att gcc ttt ctg ggg gtt ttg tcc tgt ttc cac act gcc ttc atg ctc 336
 Ile Ala Phe Leu Gly Val Leu Ser Cys Phe His Thr Ala Phe Met Leu
 100 105 110

ttc tgc atc agc gtc acc aga tac tta gcc atc gcc cat cac cgc ttc 384
 Phe Cys Ile Ser Val Thr Arg Tyr Leu Ala Ile Ala His His Arg Phe
 115 120 125

tat aca aag agg ctg acc ttt tgg acg tgt ttg gct gtg atc tgc atg 432
 Tyr Thr Lys Arg Leu Thr Phe Trp Thr Cys Leu Ala Val Ile Cys Met
 130 135 140

gtg tgg act ctg tct gtg gcc atg gca ttt ccc cca gtt tta gat gta 480
 Val Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Leu Asp Val
 145 150 155 160

ggc acc tac tca ttc att agg gag gag gat cag tgt acc ttc caa cac 528
 Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His
 165 170 175

cgc tcc ttc agg gct aac gat tcc cta gga ttt atg ctg ctc ctt gct 576
 Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Ala
 180 185 190

ctc atc ctc cta gcc aca cag ctt gtc tac ctc aag ctg ata ttt ttt 624
 Leu Ile Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe
 195 200 205

gtc cac gat cga agg aaa atg aag cca gtc cag ttt gta gca gca gtg 672
 Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val
 210 215 220

agt cag aac tgg acc ttt cat ggc cct gga gct agt ggc cag gca gct 720
 Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala
 225 230 235 240

gcc aat tgg cta gca gga ttt gga agg ggt ccc aca cca ccc acc ttg 768
 Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu

Best Available Copy

19/24

245

250

255

ctg ggc atc agg caa aat gcg aat acc aca ggc aga aga cgg ctc ttg 816
 Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu
 260 265 270

gtt ttg gat gag ttc aaa atg gag aaa aga atc agc aga atg ttc tat 864
 Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr
 275 280 285

ata atg act ttc ctc ttc cta acc ttg tgg ggt ccc tac ctg gtg gcc 912
 Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala
 290 295 300

tgc tat tgg aga gtt ttt gca aga ggg cct gta gta cca ggg gga ttt 960
 Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe
 305 310 315 320

cta aca gcc gct gtc tgg atg agt ttc gcc caa gca gga atc aat ccc 1008
 Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro
 325 330 335

ttt gtc tgc att ttc tcc aac agg gag ctg agg cgc tgt ttc agc aca 1056
 Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr
 340 345 350

acc ctt ctt tac tgc aga aaa tcc agg tta cca agg gaa cct tac tgt 1104
 Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys
 355 360 365

gtt ata tga 1113
 Val Ile
 370

<210> 24
 <211> 370
 <212> PRT
 <213> Rattus sp.

<400> 24
 Met Ala Asn Tyr Ser His Ala Ala Asp Asn Ile Leu Gln Asn Leu Ser
 1 5 10 15

Pro Leu Thr Ala Phe Leu Lys Leu Thr Ser Leu Gly Phe Ile Ile Gly
 20 25 30

Val Ser Val Val Gly Asn Leu Leu Ile Ser Ile Leu Leu Val Lys Asp
 35 40 45

Lys Thr Leu His Arg Ala Pro Tyr Tyr Phe Leu Leu Asp Leu Cys Cys
 50 55 60

Ser Asp Ile Leu Arg Ser Ala Ile Cys Phe Pro Phe Val Phe Asn Ser
 65 70 75 80

80

Best Available Copy

20/24

Val Lys Asn Gly Ser Thr	Trp Thr Tyr Gly Thr Leu Thr Cys Lys Val		
85	90	95	
Ile Ala Phe Leu Gly Val	Leu Ser Cys Phe His Thr Ala Phe Met Leu		
100	105	110	
Phe Cys Ile Ser Val Thr	Arg Tyr Leu Ala Ile Ala His His Arg Phe		
115	120	125	
Tyr Thr Lys Arg Leu Thr	Phe Trp Thr Cys Leu Ala Val Ile Cys Met		
130	135	140	
Val Trp Thr Leu Ser Val	Ala Met Ala Phe Pro Pro Val Leu Asp Val		
145	150	155	160
Gly Thr Tyr Ser Phe Ile Arg Glu Glu Asp Gln Cys Thr Phe Gln His			
165	170	175	
Arg Ser Phe Arg Ala Asn Asp Ser Leu Gly Phe Met Leu Leu Ala			
180	185	190	
Leu Ile Leu Leu Ala Thr Gln Leu Val Tyr Leu Lys Leu Ile Phe Phe			
195	200	205	
Val His Asp Arg Arg Lys Met Lys Pro Val Gln Phe Val Ala Ala Val			
210	215	220	
Ser Gln Asn Trp Thr Phe His Gly Pro Gly Ala Ser Gly Gln Ala Ala			
225	230	235	240
Ala Asn Trp Leu Ala Gly Phe Gly Arg Gly Pro Thr Pro Pro Thr Leu			
245	250	255	
Leu Gly Ile Arg Gln Asn Ala Asn Thr Thr Gly Arg Arg Arg Leu Leu			
260	265	270	
Val Leu Asp Glu Phe Lys Met Glu Lys Arg Ile Ser Arg Met Phe Tyr			
275	280	285	
Ile Met Thr Phe Leu Phe Leu Thr Leu Trp Gly Pro Tyr Leu Val Ala			
290	295	300	
Cys Tyr Trp Arg Val Phe Ala Arg Gly Pro Val Val Pro Gly Gly Phe			
305	310	315	320
Leu Thr Ala Ala Val Trp Met Ser Phe Ala Gln Ala Gly Ile Asn Pro			
325	330	335	
Phe Val Cys Ile Phe Ser Asn Arg Glu Leu Arg Arg Cys Phe Ser Thr			
340	345	350	
Thr Leu Leu Tyr Cys Arg Lys Ser Arg Leu Pro Arg Glu Pro Tyr Cys			
355	360	365	
Val Ile			
370			

Best Available Copy

21/24

<210> 25
<211> 1122
<212> DNA
<213> Rat coronavirus

<220>
<221> CDS
<222> (1)..(1119)
<223> Rat SREB3

<400> 25

atg gcc aac acc acc gga gag ccc gaa gag gtg agc ggc gca ctg tcc 48
Met Ala Asn Thr Thr Gly Glu Pro Glu Glu Val Ser Gly Ala Leu Ser
1 5 10 15

ctg cca tca gca tcg gct atg gtg aag ctg gtg ctg ctg gga ctg atc 96
Leu Pro Ser Ala Ser Ala Tyr Val Lys Leu Val Leu Leu Gly Leu Ile
20 25 30

atg tgt gta agc ctg gca ggc aat gcc atc ttg tcc ctg ctg gtg ctc 144
Met Cys Val Ser Leu Ala Gly Asn Ala Ile Leu Ser Leu Leu Val Leu
35 40 45

aag gag cgt gcc ctg cac aag gct cct tac tac ttt ctg ctg gac ctg 192
Lys Glu Arg Ala Leu His Lys Ala Pro Tyr Tyr Phe Leu Leu Asp Leu
50 55 60

tgc cta gcc gat ggc ata cgc tct gcc atc tgc ttc ccc ttt gta ctg 240
Cys Leu Ala Asp Gly Ile Arg Ser Ala Ile Cys Phe Pro Phe Val Leu
65 70 75 80

gct tct gtg cgc cat ggc tcc tcg tgg acc ttc agt gca ctc agc tgt 288
Ala Ser Val Arg His Gly Ser Ser Trp Thr Phe Ser Ala Leu Ser Cys
85 90 95

aag att gtg gcc ttt atg gct gtg ctc ttc tgc ttc cat gcg gcc ttc 336
Lys Ile Val Ala Phe Met Ala Val Leu Phe Cys Phe His Ala Ala Phe
100 105 110

atg ctg ttc tgc atc agc gtc acc cgc tac atg gcc atc gcc cac cac 384
Met Leu Phe Cys Ile Ser Val Thr Arg Tyr Met Ala Ile Ala His His
115 120 125

cgc ttc tat gcc aag cgc atg aca ctc tgg aca tgc gca gct gtc atc 432
Arg Phe Tyr Ala Lys Arg Met Thr Leu Trp Thr Cys Ala Ala Val Ile
130 135 140

tgc atg gcc tgg acc ttg ttt gtg gcc atg gct ttc cca cct gtc ttt 480
Cys Met Ala Trp Thr Leu Ser Val Ala Met Ala Phe Pro Pro Val Phe
145 150 155 160

gat gtg ggc acc tac aag ttt atc cga gag gag gac cag tgc atc ttt 528
Asp Val Gly Thr Tyr Lys Phe Ile Arg Glu Glu Asp Gln Cys Ile Phe
165 170 175

Best Available Copy

22/24

gag cat cgc tac ttc aaa	gca aat gac act ctg ggc ttt atg ctt atg	576	
Glu His Arg Tyr Phe Lys	Ala Asn Asp Thr Leu Gly Phe Met Leu Met		
180	185	190	
ttg gct gtg ctc atg gca	gcc aca cat gct gtc tat ggc aag ctg cta	624	
Leu Ala Val Leu Met Ala	Ala Thr His Ala Val Tyr Gly Lys Leu Leu		
195	200	205	
ctc ttc gag tat cgt cac	cgc aag atg aag cca gtg cag atg gtg ccc	672	
Leu Phe Glu Tyr Arg His	Arg Lys Met Lys Pro Val Gln Met Val Pro		
210	215	220	
gcc atc agc caa aac tgg	aca ttc cat ggc cct ggg gct acc ggc cag	720	
Ala Ile Ser Gln Asn Trp	Thr Phe His Gly Pro Gly Ala Thr Gly Gln		
225	230	235	240
gct gct gcc aac tgg atc	gct ggc ttt ggc cgt ggg ccc atg cca cca	768	
Ala Ala Ala Asn Trp Ile	Ala Gly Phe Gly Arg Gly Pro Met Pro Pro		
245	250	255	
act ctg ctg ggt atc cgg	cag aat ggg cat gca gct agc cgg cgg cta	816	
Thr Leu Leu Gly Ile Arg	Gln Asn Gly His Ala Ala Ser Arg Arg Leu		
260	265	270	
ctg ggc atg gac gag gtc	aag ggt gaa aag cag ctg ggc cga atg ttc	864	
Leu Gly Met Asp Glu Val	Lys Gly Glu Lys Gln Leu Gly Arg Met Phe		
275	280	285	
tac gcg att aca ctg ctc	tac ctg ctc ctc tgg tca cca tac att gtg	912	
Tyr Ala Ile Thr Leu Leu	Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val		
290	295	300	
gcc tgc tac tgg cga gtg	ttt gtg aaa gcc tgc gct gtg ccc cac cgc	960	
Ala Cys Tyr Trp Arg Val	Phe Val Lys Ala Cys Ala Val Pro His Arg		
305	310	315	320
tac ctg gcc act gct gtt	tgg atg agc ttc gcc cag gct gtc aac	1008	
Tyr Leu Ala Thr Ala Val	Trp Met Ser Phe Ala Gln Ala Ala Val Asn		
325	330	335	
cca atc gtc tgc ttc ctg	ctt aac aag gac ctc aag aag tgc ctg agg	1056	
Pro Ile Val Cys Phe Leu	Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg		
340	345	350	
act cat gcc cct tgc tgg	ggc aca gga ggt gcc cca gct ccc aga gaa	1104	
Thr His Ala Pro Cys Trp	Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu		
355	360	365	
ccc tac tgt gtc atg tga		1122	
Pro Tyr Cys Val Met			
370			

<210> 26
<211> 373

Best Available Copy

23/24

<212> PRT

<213> Rat coronavirus

<400> 26

Met	Ala	Asn	Thr	Thr	Gly	Glu	Pro	Glu	Glu	Val	Ser	Gly	Ala	Leu	Ser	
1					5					10					15	
Leu	Pro	Ser	Ala	Ser	Ala	Tyr	Val	Lys	Leu	Val	Leu	Leu	Gly	Leu	Ile	
					20			25						30		
Met	Cys	Val	Ser	Leu	Ala	Gly	Asn	Ala	Ile	Leu	Ser	Leu	Leu	Val	Leu	
					35			40						45		
Lys	Glu	Arg	Ala	Leu	His	Lys	Ala	Pro	Tyr	Tyr	Phe	Leu	Leu	Asp	Leu	
					50			55						60		
Cys	Leu	Ala	Asp	Gly	Ile	Arg	Ser	Ala	Ile	Cys	Phe	Pro	Phe	Val	Leu	
					65			70			75			80		
Ala	Ser	Val	Arg	His	Gly	Ser	Ser	Trp	Thr	Phe	Ser	Ala	Leu	Ser	Cys	
					85			90						95		
Lys	Ile	Val	Ala	Phe	Met	Ala	Val	Leu	Phe	Cys	Phe	His	Ala	Ala	Phe	
					100			105						110		
Met	Leu	Phe	Cys	Ile	Ser	Val	Thr	Arg	Tyr	Met	Ala	Ile	Ala	His	His	
					115			120						125		
Arg	Phe	Tyr	Ala	Lys	Arg	Met	Thr	Leu	Trp	Thr	Cys	Ala	Ala	Val	Ile	
					130			135						140		
Cys	Met	Ala	Trp	Thr	Leu	Ser	Val	Ala	Met	Ala	Phe	Pro	Pro	Val	Phe	
					145			150			155			160		
Asp	Val	Gly	Thr	Tyr	Lys	Phe	Ile	Arg	Glu	Glu	Asp	Gln	Cys	Ile	Phe	
					165			170						175		
Glu	His	Arg	Tyr	Phe	Lys	Ala	Asn	Asp	Thr	Leu	Gly	Phe	Met	Leu	Met	
					180			185						190		
Leu	Ala	Val	Leu	Met	Ala	Ala	Thr	His	Ala	Val	Tyr	Gly	Lys	Leu	Leu	
					195			200						205		
Leu	Phe	Glu	Tyr	Arg	His	Arg	Lys	Met	Lys	Pro	Val	Gln	Met	Val	Pro	
					210			215						220		
Ala	Ile	Ser	Gln	Asn	Trp	Thr	Phe	His	Gly	Pro	Gly	Ala	Thr	Gly	Gln	
					225			230						235		240
Ala	Ala	Ala	Asn	Trp	Ile	Ala	Gly	Phe	Gly	Arg	Gly	Pro	Met	Pro	Pro	
					245			250						255		
Thr	Leu	Leu	Gly	Ile	Arg	Gln	Asn	Gly	His	Ala	Ala	Ser	Arg	Arg	Leu	
					260			265						270		
Leu	Gly	Met	Asp	Glu	Val	Lys	Gly	Glu	Lys	Gln	Leu	Gly	Arg	Met	Phe	

84

Best Available Copy

24/24

275

280

285

Tyr Ala Ile Thr Leu Leu Phe Leu Leu Leu Trp Ser Pro Tyr Ile Val
290 295 300

Ala Cys Tyr Trp Arg Val Phe Val Lys Ala Cys Ala Val Pro His Arg
305 310 315 320

Tyr Leu Ala Thr Ala Val Trp Met Ser Phe Ala Gin Ala Ala Val Asn
325 330 335

Pro Ile Val Cys Phe Leu Leu Asn Lys Asp Leu Lys Lys Cys Leu Arg
340 345 350

Thr His Ala Pro Cys Trp Gly Thr Gly Gly Ala Pro Ala Pro Arg Glu
355 360 365

Pro Tyr Cys Val Met
370

Pro Tyr Cys Val Met
370

卷之三

نیشن